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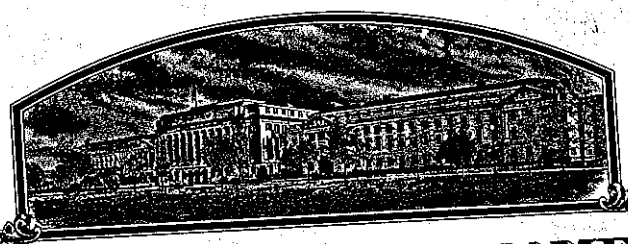

No. 8000136

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Rosebud Cottonseed Treating Co., Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF seventeen YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS ... OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS ... BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

COTTON

'PR 80'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington this 20th day of November in the year of our Lord one thousand nine hundred and eighty.

Attest:

Kenneth H. Evans
Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

John R. Block
Secretary of Agriculture

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, POULTRY, GRAIN & SEED DIVISION

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: *See Reverse.*

FORM APPROVED
OMB NO. 40-R3822

No certificate for plant variety protection may be issued unless a completed application form has been received (5 U.S.C. 553).

1a. TEMPORARY DESIGNATION OF VARIETY	1b. VARIETY NAME	FOR OFFICIAL USE ONLY
PR80	PR80	PV NUMBER 8000136
2. KIND NAME: Cotton	3. GENUS AND SPECIES NAME: Gossypium hirsutum L.	FILING DATE 6/27/80 · TIME 1:30 A.M. (P.M.)
4. FAMILY NAME (BOTANICAL): Malvaceas	5. DATE OF DETERMINATION: May, 1976	FEE RECEIVED $ 500.00 $ 250.00 · DATE 6/27/80 10/16/80

6. NAME OF APPLICANT(S)	7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)	8. TELEPHONE AREA CODE AND NUMBER
ROSEBUD COTTONSEED ~~Pioneer Hi-Bred International, Inc.~~ TREATING CO., INC. 8/11/85	~~Route #3~~ P.O. Box 613 ROSEBUD ~~Vernon~~, Texas ~~76384~~ 76570	697-6731 817-~~552-6242~~

9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Corporation, partnership, association, etc.)	10. IF INCORPORATED, GIVE STATE AND DATE OF INCORPORATION	11. DATE OF INCORPORATION
Corporation	~~Iowa~~ TEXAS	~~May 7, 1926~~

12. NAME AND MAILING ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS: ~~Dr. Jerry L. Baker~~ CLARENCE WOLF, PRESIDENT
~~Cotton Breeding Department~~
~~Pioneer Hi-Bred International, Inc.~~ Route ~~#3~~
~~Vernon~~, Texas ~~76384~~

13. **CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:**

- [X] 13A. Exhibit A, Origin and Breeding History of the Variety *(See Section 52 of the Plant Variety Protection Act.)*
- [X] 13B. Exhibit B, Novelty Statement.
- [X] 13C. Exhibit C, Objective Description of the Variety *(Request form from Plant Variety Protection Office.)*
- [X] 13D. Exhibit D, Additional Description of the Variety.

14a. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? *(See Section 83(a). (If "Yes," answer 14B and 14C below.)* [X] YES [ ] NO

14b. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?	14c. IF "YES," TO 14B, HOW MANY GENERATIONS OF PRODUCTION BEYOND BREEDER SEED?
[X] YES [ ] NO	[X] FOUNDATION [X] REGISTERED [X] CERTIFIED

15a. DID THE APPLICANT(S) FILE FOR PROTECTION OF THIS VARIETY IN OTHER COUNTRIES? [ ] YES [X] NO *(If "Yes," give name of countries and dates.)*

15b. HAVE RIGHTS BEEN GRANTED THIS VARIETY IN OTHER COUNTRIES? [ ] YES [X] NO *(If "Yes," give name of countries and dates.)*

7/31/80

16. DOES THE APPLICANT(S) AGREE TO THE PUBLICATION OF HIS/HER (THEIR) NAME(S) AND ADDRESS IN THE OFFICIAL JOURNAL? [X] YES [ ] NO

17. The applicant(s) declare(s) that a viable sample of basic seed of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

Pioneer Hi-Bred International, Inc.

June 19, 1980 — by Jerry L. Baker
(DATE) (SIGNATURE OF APPLICANT)

(DATE) (SIGNATURE OF APPLICANT)

0861 2 2 NUL

INSTRUCTIONS

GENERAL: Send an original copy of the application and exhibits, at least 2,500 viable seeds, and $500 fee ($250 filing fee and $250 examination fee) to U.S. Dept. of Agriculture, Agricultural Marketing Service, Livestock, Poultry, Grain and Seed Division, Plant Variety Protection Office, National Agricultural Library Building, Beltsville, Maryland 20705. (See section 180.175 of the Regulations and Rules of Practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

ITEM

5 Give the date the applicant determined that he had a new variety based on (1) the definition in section 41(a) of the Act and (2) the date a decision was made to increase the seed.

13a Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified and (4) evidence of uniformity and stability.

13b Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished from all other varieties in the same crop. If the new variety most closely resembles one or a group of related varieties: (1) identify these varieties and state all differences objectively; (2) attach statistical data for characters expressed numerically and demonstrate that these differences are significant; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty.

13c Fill in the Exhibit C, Objective Description form, for all characteristics for which you have adequate data.

13d Describe any additional characteristics that are not described, or whose description cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the description of characteristics that are difficult to describe, such as, plant habit, plant color, disease resistance, etc.

14a If "YES" is specified (seed of this variety be sold by variety name only as a class of certified seed) the applicant may NOT reverse his affirmative decision after the variety has either been sold and so labeled, his decision published, or the certificate has been issued. However, if the applicant specified "NO," he may change his choice. (See section 180.16 of the Regulations and Rules of Practice.)

15a See section 42 of the Plant Variety Protection Act and section 180.7 of the Regulations and Rules of Practice.

EXHIBIT A

"ORIGIN AND BREEDING HISTORY OF THE VARIETY"

1. The parents used in originating and developing "PR80" were "SP23" and "52Ø,BV65." "SP23" became the variety "Tamcot SP23" and "52Ø" was a related strain to "Tamcot SP21." The material is of the "CAMD" (hybridization among SP types) germplasm group. Therefore, the cross was originated by Dr. Luther S. Bird and his associates at Texas A & M University.

The cross was made to combine disease and insect resistance with earliness and high lint yield potential. Both parents possessed high yielding ability, earliness, storm resistant bolls and resistance to bacterial blight, fusarium wilt-nematode, verticillium wilt and seed deterioration. In, addition the "52Ø,BV65" parent was a glabrous type which is known to confer tolerance to the Heliothis spp. Both parents carry the gene combination $B_2B_3B_7$ for bacterial blight resistance.

The breeding method used in developing "PR80" was the pedigree method with slight modifications.

2. "PR80" originated in 1966-67 from a hand pollinated cross between the two SP strains, "SP23" and "52Ø,BV65," in the Texas A & M greenhouse at College Station, Texas. The F_1's were grown on the Upland Farm at College Station in 1967 and individual plant selections were made for resistance to bacterial blight. Selected progeny were grown in the Texas A & M field nursery at Chillicothe-Odell, Texas in 1968 and individual plant selections were made for resistance to the fusarium wilt-nematode complex. This nursery was naturally infested with the fungus causing fusarium wilt, Fusarium oxysporum f. vasinfectum (ATK.) Snyder and Hansen, and the root-knot nematode, Meloidogyne incognita, Chitwood.

EXHIBIT A (CONTINUED)

Laboratory-greenhouse procedures for simultaneously screening and selecting for multiple disease resistance were applied. Seed from F_2 and F_4 individual plant selections were tested in the Fall of 1968 and 1969, respectively. Individual selections were made based on seed coat resistance to mold and to a reduced rate of germination when held for eight days on 1.5 percent water agar at 56°F. This was followed by an evaluation for high seedling cotyledon resistance to a mixed inoculum of races 1, 2, 7 and 14 of the bacterial blight pathogen, Xanthomonas malvacearum (E. F. Sm.) Dowson.

Selected plants from the greenhouse were grown in the field in 1969 and 1970. Individual and progeny row selections were made based on yield, earliness, multiple disease resistance, agronomic performance and fiber quality. Selecting to the F_6 gave strain designation, "H^2-12-70." In 1971, seed of this strain was released by Texas A & M to The Lockett Seed Company for use in their breeding program. From 1972 to 1975 individual, progeny row and/or increase row selections were made in the material on the basis of yield potential, earliness, multiple disease resistance, agronomic performance and fiber characteristics.

Duplicate plantings of the germplasm were made each year from 1973 to 1975 at The Lockett Seed Company breeding nurseries at Lockett and Ropesville, Texas. The Lockett breeding nursery is naturally infested with the fusarium wilt fungus and the root-knot nematode. The Ropesville nursery is naturally infested with Verticillium albo-atrum, Reinke and Berth. Artificial inoculations with a mixture of races 1, 2, 7 and 18 of the bacterial blight pathogen were made each year.

EXHIBIT A (CONTINUED)

Replicated yield trials have been conducted over a wide area of Texas and Oklahoma at numerous locations for five years, 1974, 1976-1979. These tests were conducted by The Lockett Seed Company, Pioneer Hi-Bred International, Inc. and State Agricultural Experiment Stations; under irrigation and dryland conditions (data attached). Also, large strip test comparisons were made in 1979 over 34 locations in Texas and Oklahoma. The variety was tested under the strain numbers "H^2-12-70," "7006" and "X7006." "PR80" is a stable, uniform and homogeneous variety.

Breeders seed of "PR80" was grown near Lockett, Texas in 1977, 1978 and 1979. Foundation seed will be increased in 1980, as shown in the diagram.

3. "PR80" may include yellow pollen color variants up to a frequency of 10% during reproduction and multiplication. "PR80" is a glabrous type and the frequency of plants with no hairs is greater than 85%. Therefore, it may include pubescent variants up to a frequency of 15%.

4. "PR80" is a uniform, stable variety that reproduces true-to-type each generation. No mutations or off-types other than the genetic variants mentioned above (3), have been observed in Breeder seed.

EXHIBIT A (CONTINUED)

PEDIGREE OF "PR80"

1966-67 Greenhouse, College Station, Texas	SP23 X 52Ø,BV65	
1967 College Station-Upland Farm	Individual plant selection. Bacterial blight screening.	F_1
1968 Chillicothe-Odell, Texas	Fusarium wilt-nematode screening. Progeny row and individual plant selection.	F_2
1968-69 Greenhouse-College Station	Multiple disease resistance screening. Individual palnt selection.	F_3
1969 Brazos Valley	Individual and progeny row selection.	F_4
1969-70 Greenhouse-College Station	Multiple disease resistance screening. Individual plant selection.	F_5
1970 Brazos Valley	Progeny rows-testing, evaluation and selection.	F_6
1971	Germplasm released to Lockett Seed Co.	
1972 Lockett, Texas	Individual and progeny row selection.	F_7
1973 Lockett and Ropesville, Texas	Individual and progeny row selection.	F_8
1974 Lockett and Ropesville	Progeny rows-testing, evaluation and selection. Company replicated performance tests.	F_9
1975 Lcokett and Roperville	Increase rows-evaluation and selection.	F_{10}
1976 Lockett	Increase block-0.05 acres-Breeders seed. Company performance tests.	F_{11}

EXHIBIT A (CONTINUED)

PEDIGREE OF "PR80"

1977 Lockett	Increase block-1.5 acres-Breeders seed. Company performance tests at four Texas locations.	F_{12} ↓
1978 Lockett	Increase block-30 acres-Breeders seed. Oklahoma and Texas Statewide yield trials. Company performance tests at seven Texas locations.	F_{13} ↓
1979 Lockett	Increase block-200 acres-Parent seed. Oklahoma and Texas Statewide yield trials. Company performance tests at ten locations in Texas. Company cotton strip test comparisons at 34 locations in Texas and Oklahoma.	F_{14}
1980	Increase block-1800 acres-Foundation seed.	

EXHIBIT B

"NOVELTY STATEMENT"

Novelty is based on the unique combination of the following characteristics:

"PR80" most closely resembles "Tamcot SP21S," but "PR80" has a higher lint percentage (38.4 vs 36.8%), shorter lint fibers (1.008 vs 1.039 inches), better length uniformity index (47.5 vs 45.4%), lower fiber elongation (6.22 vs 7.27%), and higher micronaire (4.19 vs 3.49) than "Tamcot SP21S" (see Table 1).

Table 1. Comparison of PR80 with Tamcot SP21S.

Variety	Boll Size [1]	Seed Index	Seeds per boll	Lint percent	Fiber Length 2.5% SL	Fiber Length 50% SL	Fiber Length Unif. Index	Strength T_1	Strength MPSI	Elongation E_1	Micronaire
Number of Comparisons (n)	8	8	8	16	16	6	13	11	13	6	16
PR80	82.1	10.6	30.6	38.4	1.008	0.468	47.5	20.8	89.8	6.22	4.19
Tamcot SP21S	81.9	10.5	31.7	36.8	1.039	0.462	45.4	20.8	89.7	7.27	3.49
Difference	0.2	0.1	-1.1	1.6 [2]	-0.031 [3]	0.006	2.1 [3]	0.0	0.1	-1.05 [3]	0.70 [2]

1/ Number of bolls necessary to produce one pound of seed cotton.

2/ Significant at the 1% probability level.

3/ Significant at the 5% probability level.

FORM APPROVED. OMB NO. 40-R3712

FORM GR-470-8 (10-2-72)

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782

EXHIBIT C (Cotton)

OBJECTIVE DESCRIPTION OF VARIETY

INSTRUCTIONS: See Reverse.

COTTON (*GOSSYPIUM SPP.*)

NAME OF APPLICANT(S)

Pioneer Hi-Bred International, Inc.

ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)

Cotton Breeding Department
Route #3
Vernon, Texas 76384

FOR OFFICIAL USE ONLY

PVPO NUMBER 8000136

VARIETY NAME OR TEMPORARY DESIGNATION PR 80

Place the appropriate number that describes the varietal character of this variety in the boxes below.
Place a zero in first box (e.g. [0][8][9] or [0][9]) when number is either 99 or less or 9 or less.

1. SPECIES:

[1] 1 = GOSSYPIUM HIRSUTUM 2 = GOSSYPIUM BARBADENSE

2. AREA(S) OF ADAPTION (0 = Not Tested, 1 = Not Adapted, 2 = Adapted):

[0] EASTERN [0] DELTA [2] CENTRAL [2] HIGH PLAINS [2] EL PASO AREA

[0] WESTERN LOW HOT VALLEYS [0] SAN JOAQUIN [ ] OTHER (Specify) _____

3. MATURITY (50% Open Boll):

[1][2] NO. OF DAYS *EARLIER* THAN . . . . . [7]

[ ][ ] NO. OF DAYS *LATER* THAN . . . . . [ ]

1 = COKER 310 2 = DELTAPINE 16 3 = STONEVILLE 213
4 = PAYMASTER 111 5 = ACALA 1517-70 6 = ACALA SJ-1
7 = LANKART 57 8 = OTHER (Specify) _____

4. PLANT HABIT:

[2] 1 = SPREADING 2 = INTERMEDIATE 3 = COMPACT

[1] 1 = FOLIAGE SPARSE 2 = DENSE 3 = OTHER (Specify) _____

5. PLANT HEIGHT:

[1][0] CM. *SHORTER* THAN . . . . . [4]

[1][0] CM. *TALLER* THAN . . . . . [7]

1 = COKER 310 2 = DELTAPINE 16 3 = STONEVILLE 213
4 = PAYMASTER 111 5 = ACALA 1517-70 6 = ACALA SJ-1
7 = LANKART 57 8 = OTHER (Specify) _____

6. MAIN STEM:

[3] 1 = LAX 2 = ASCENDING 3 = ERECT

[16] CM. TO FIRST FRUITING BRANCH

[0][6] NO. OF NODES TO FIRST FRUITING BRANC (from cotyledonary node)

7. LEAF:

[1][4] CM. WIDTH OF WIDEST LEAVES AT MATURITY

8. LEAF PUBESCENSE:

[1*] 1 = GLABROUS (HAIRS AS SPARSE AS D_2 SMOOTH)
2 = SMOOTH LEAF (DELTAPINE SMOOTH LEAF) 3 = PUBESCENT (STONEVILLE 213)
4 = HEAVY PUBESCENCE (H_1 OR H_2) 5 = OTHER (Specify) *85% glabrous plants

9. LEAF COLOR:

[2] 1 = VIRESCENT YELLOW 2 = LIGHT GREEN 3 = DARK GREEN (*Acala-442*) 4 = RED
5 = OTHER (Specify) _____

10. LEAF TYPE:

[1] 1 = NORMAL 2 = OKRA 3 = SUPER OKRA 4 = OTHER (Specify) _____

11. FLOWER:

[2] 1 = NECTARILESS 2 = NECTARIED

[1] Petals: 1 = CREAM 2 = YELLOW

[*] Pollen: 1 = CREAM 2 = YELLOW

* Pollen color is cream and yellow in the ratio of 9:1.

12. FRUITING BRANCH TYPE:

[2] 1 = CLUSTER 2 = SHORT 3 = NORMAL

[1] 1 = DETERMINATE 2 = INDETERMINATE

13. GOSSYPOL CONDITION:

[3] 1 = GLANDLESS 2 = REDUCED GLANDS 3 = NORMAL GLANDS
4 = OTHER (Specify) _____

[1] 1 = NORMAL BUD GOSSYPOL
2 = HIGH BUD GOSSYPOL

14. SEEDS:

PR 80

FORM GR-470-8 (REVERSE)

15. BOLLS:

[2] Locules: 1 = 3-4, 2 = 4-5

[3 1] NO. SEEDS PER BOLL

[3 8 7] LINT PERCENT

[3 5] MM. DIAMETER

[2] Pitted: 1 = NONE, 2 = FINELY, 3 = COURSELY

[5 5 2] GRAMS SEED COTTON PER BOLL

[2] Breadth: 1 = BROADER AT BASE, 2 = BROADER AT MIDDLE

[2] Type: 1 = STORMPROOF (WESTBURN 70), 2 = STORM RESISTANT (LANKART 57), 3 = OPEN (DELTAPINE 16)

[3] Shape: 1 = LENGTH < WIDTH, 2 = LENGTH = WIDTH, 3 = LENGTH > WIDTH

16. BRACTEOLES:

[3] Breadth: 1 = LENGTH < WIDTH 2 = LENGTH = WIDTH 3 = LENGTH > WIDTH

[1] Teeth: 1 = FINE 2 = COURSE

[3] Teeth: 1 = 3-4 2 = 5-7 3 = 8-10 4 = OTHER (*Specify*) _____

17. YIELD: Compared to—

[ ] PERCENT *LESS* THAN .....

[2 4 9] PERCENT *MORE* THAN .....

[ ] [7] 1 = COKER 310 2 = DELTAPINE 16 3 = STONEVILLE 213 4 = PAYMASTER 111 5 = ACALA 1517-70 6 = ACALA SJ-1 7 = LANKART 57 LX571

18. FIBER LENGTH (Complete one or more of the following and give the means):

[0 4 8] SPAN LENGTH 50%

[1 0 1] SPAN LENGTH 2.5%

[ ] U.H.M. LENGTH

[ ] MEAN LENGTH

[3 2] STAPLE LENGTH 32nd INCHES

[ ] UNIFORMITY RATIO (MEAN/U.H.M.)

[4 7] UNIFORMITY INDEX (50% SPAN/2.5% SPAN)

19. FIBER STRENGTH AND ELONGATION:

[0 9 1] 1,000 P.S.I.

[0 6 3] ELONGATION E_1

[4 1 0] STILOMETER T_0

[4 2 6] MICRONAIRE READING

[1 0 3] YARN STRENGTH (*Give test method*) 22's or 27 tex

[2 1 1] STILOMETER T_1

20. DISEASE: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

[*] VERTICILLIUM WILT	[2] FUSARIUM WILT	[2] ROOT KNOT NEMATODE	[2] BACTERIAL BLIGHT (*Race 1*)
[2] BACTERIAL BLIGHT (*Race 2*)	[0] ASCOCHYTA BLIGHT	[1] PHYMATOTRICHUM ROOT ROT	[0] RHIZOCTONIA
[0] ANTHRACNOSE	[0] RUST	[ ] OTHER (*Specify*)	* Tolerance

21. INSECT: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

[1] BOLL WEEVIL	[1] APHID	[1] FLEAHOPPER	[0] LEAFWORM
[1] FALL ARMYWORM	[0] GRASSHOPPER	[1] LYGUS	[1] PINK BOLLWORM
[0] STINKBUG	[1] THRIP	[0] CUTWORM	[*] SPIDERMITE

[2] OTHER (*Specify*) Cotton Bollworm * Tolerant

REFERENCES: The following publications may be used as a reference aid for the standardization of terms and procedures for completing this form:

(1) Brown, Harry B., and J. O. Ware, 1958, Cotton, McGraw-Hill Book Company, Inc., New York.

(2) Lewis, C. F., and H. H. Ramey, Jr., 1971, 1970 Regional Cotton Variety Tests, ARS 34-130, United States Department of Agriculture.

COLORS: Nickerson's or any recognized color fan may be used to determine flower color of the described variety.

EXHIBIT D

"ADDITIONAL DESCRIPTION OF THE VARIETY"

"PR80" is an American Upland cotton variety, Gossypium hirsutum L. The unique characteristics of "PR80" are glabrous plant parts, multiple disease resistance, earliness and high yield potential. It exhibits high resistance to bacterial blight; resistance to the fusarium wilt-root knot nematode complex; and tolerance to verticillium wilt. "PR80" has also shown seedling disease escape and cold tolerance. Its glabrous plant parts do confer tolerance to the Heliothis spp. Also, due to glabrousness, fiber grades of "PR80" reflect less lint trash in comparison with those of fiber from pubescent varieties.

"PR80" is similar in plant stature and type (glabrous) to "Tamcot SP21S." The variety has slightly earlier maturity than "Tamcot SP21S," but is slightly later than "Tamcot CAMD-E." The bolls of "PR80" are storm resistant, and the plant type and fruiting habit are suitable for both machine stripping or picking. "PR80" has an average of 82 bolls per pound of seed cotton (i.e., 5.52 grams of seed cotton per boll), and an excellent lint percent average of 38.7. The ginned seed have moderate lint fuzz.

Based on five years (1974, 1976-1979) of performance trials, the average fiber quality traits of "PR80" are:

Length	- Inches	32
	- 50% Span	0.48
	- 2.5% Span	1.01
	- Uniformity Index	47
Strength	- MPSI	91
	- Stelometer (T_1)	21.1
	- Elongation (E_1)	6.3

EXHIBIT D (CONTINUED)

Yarn Strength - 22's or 27 tex	103
- 30's or 20 tex	70
Fineness - Micronaire	4.26

"PR80" has been tested over a wide range of environments in Texas and Oklahoma for five years. It has demonstrated adaptability to most growing conditions in these states, i.e., high yielding ability, good fiber quality, and stability to adversities in production and environmental fluctuations.

Table 2, a summary table, shows yield, lint percentage and fiber properties of "PR80" in comparison to commercial varieties grown in Texas and Oklahoma in 41 yield tests in the five-year period, 1974 and 1976-1979.

Table 3 shows average lint yield of "PR80" as compared to twelve leading commercial cotton varieties.

BILL OF SALE

For good and valuable consideration the receipt of which is hereby acknowledged, the undersigned does hereby assign, sell, set over, transfer and grant to Rosebud Cottonseed Treating Co., Inc., a Texas corporation, all of the rights, title and interest of the undersigned in and to the following described property.

1. 500 50-pound bags of cottonseed variety "PR80" (foundation seed).
2. Plant Variety Protection Certificate #8000136 for cottonseed variety "PR80" together with assignment of ownership from seller to buyer.

DATED this 15th day of May, 1984.

PIONEER HI-BRED INTERNATIONAL, INC.

By: Edwin J. Mueller President
Title

Southwestern Division

ATTEST:

L. M. Worley
~~Secretary~~ Witness

ASSIGNMENT

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, the undersigned Pioneer Hi-Bred International, Inc. a corporation organized under the laws of the State of Iowa, is the breeder and owner of a variety of cotton planting seed known as "PR80", and

WHEREAS, the United States Department of Agriculture has granted to the undersigned a Certificate of Plant Variety Protection of said variety, being Certificate Number 8000136,

NOW, THEREFORE, for good and valuable consideration the receipt whereof is hereby acknowledged, the undersigned does hereby assign, set over, transfer and grant to Rosebud Cottonseed Treating Co., Inc., a corporation organized and existing under the laws of the State of Texas, having its principal office at Rosebud, Texas, all of the rights, title and interest of the undersigned in and to the aforesaid Certificate of Plant Variety Protection Number 8000136 and/or in and to the "PR80" variety of cotton planting seed.

DATED this 15th day of May, 1984.

PIONEER HI-BRED INTERNATIONAL, INC.

By: Edwin J. Mulder President
Title
Southwestern Division

ATTEST: